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## SYSTEM AND METHOD OF AGGREGATING DISCONTIGUOUS ADDRESS RANGES INTO ADDRESSES AND MASKS USING A PLURALITY OF REPEATING ADDRESS BLOCKS

## ABSTRACT OF THE DISCLOSURE

A method of creating a discontiguous address plan for an enterprise is provided which includes determining a hierarchy of routing optimization for an enterprise, determining a number of route advertisement aggregation points at each level of the hierarchy, determining a number of network security policy areas for the enterprise, and determining a number of addresses for each of the network security policy areas. The number of addresses is rounded up to a power of the address scheme base number to produce a plurality of rounded addresses. The method further includes allocating an address range for each of the plurality of rounded addresses so that a starting address of the address range begins on a power of the base number and determining a size of the plurality of address ranges. The size of the plurality of address ranges is rounded up to a power of the base number to produce the size of a repeating policy pattern. The method further includes assigning an instance of the repeating policy pattern to each of the route advertisement aggregation points at each hierarchy, and determining an address and a mask for each of the network security policy areas in the repeating policy pattern.